

Paediatric First Aid Guide

Your essential First Aid Guide for Children

Designed for caregivers and parents for minor injuries to critical incidents. It is recommended to seek medical attention in the event of these emergency situations as well.

Specially brought to you by our

Accident & Emergency Department









Abdominal Pain

Discomfort or pain located anywhere between the chest and the pelvis, with or without nausea, vomiting, or diarrhoea.



Common causes:



Viral gastroenteritis (stomach flu)





Constipation

Indigestion

Symptoms:



Pain that comes and goes



Fever



Vomiting and/or diarrhoea



Burping and passing gas

Immediate Action:

Give sips of clear fluid and small amounts of soft food frequently.
You may monitor your child at home if they are able to eat and drink well.
 Monitor any signs of dehydration: reduction in urine dark yellow or brown urine fewer wet nappies appears lethargic / weak irritable / cranky sunken eyes no tears when crying
 Bring your child to the doctor in these situations: severe abdominal pain pain that wakes them from sleep pain that comes and goes, or has worsened pain and a fever (temperature above 38 degrees Celsius) they are pale, sweaty and lethargic lots of diarrhoea (8-10 watery poos) signs of dehydration (as above)





Allergic Reaction (Mild)

Occurs when your body's immune system reacts to an allergen or "invader" that comes into contact with skin, nose, eyes, respiratory or gastrointestinal tract.



Symptoms:



Hives, blotchy rashes, or flushing



Itchiness over affected area or the entire body



Sneezing, runny nose, itchiness over the nose and eyes

Actions:

Identify the allergen and try to recall the possible trigger for the reaction

Take your child to a doctor. Medications
such as antihistamines may be provided to help relieve symptoms with corticosteroids to reduce inflammation.

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Follow the recommended dosage provided by the doctor.

Monitor your child at home. Take note of the allergen that caused the reaction for future references.





Allergic Reaction (Severe)

Anaphylaxis is an acute, life-threatening allergic reaction that needs to be treated immediately. It can be caused by food, medicine or insect stings/ bites.



Symptoms:



Swelling of lips, face, eyes or tongue



Mouth tingling



Stomach cramps, nausea or vomiting



Chest or throat tightness



Coughing, wheezing, or high-pitched noises during respiration



Confused, dizziness, or unresponsiveness

Actions:

Identify the allergen and try to recall the possible trigger for the reaction

Call emergency services for help or go to the nearest medical facility.



If you have been prescribed an epinephrine auto-injector (e.g. EpiPen) - instructions are included on the side of the injector.

If you have been stung by an insect, try to remove the stinger if it's visible.

Unlike mild allergies that affect specific areas, anaphylaxis causes widespread inflammation and swelling throughout the body. In severe cases, air passages may narrow leading to difficulty in breathing and may be fatal if not promptly treated





Burns

Knowing the right steps to burn injuries can help alleviate pain and prevent further damage.



Actions:

If On Fire



Stop, drop, cover your child's face, and roll



Smother the flames with a blanket



Move your child away from the fire

Remember these 4 steps:

Remove:

- Remove all clothing, including your child's diapers/nappies and jewellery.
- Do not remove anything that is stuck to the burn.



- Place the burn area under running water for at least 20 minutes.
- DO NOT use ice, butter, toothpaste, or any form of oils and creams.



- Protect the burnt area with cling film.
- Be gentle and do not break any blisters.

Seek:

Call emergency services or go straight to the A&E unit immediately.





Choking (Infant)

Occurs when the breathing passage (airway) is partially or completely blocked.



Causes: Sit on a chair and place the infant along your forearm, cradling the back of his head and neck Pieces of food with your hand. Support the infant's jaw between your thumb and fingers. Raw/Hard vegetables Turn the baby face-down onto your thigh with arm support. Ensure the baby's head is lower than their body. Do not block the baby's mouth. Deliver 5 back blows using the lower part of your palm between shoulder blades. Remove the object from your baby's mouth if it's visible. Use 2 fingers to perform 5 inward pushes below the nipples. Remember to support the head, neck, and back. Continue the back blows until object is expelled and the baby coughs. Seek for medical attention and continue the back blows and abdominal / chest thrusts if the choking persists. If the child becomes unconscious at any stage, begin CPR



Small Pills

Small Toys



Coins & Buttons



Batteries

Symptoms:

To spot choking in kids, older ones may clutch their neck. Encourage them to cough if your child is still conscious. Younger ones may not signal visibly. If a child goes silent or their face congests, promptly check their condition and begin the following steps; -



Choking (Older Children)

Choking happens when the breathing passage (airway) is partially or completely blocked.



Watch our First Aid video on Choking here

Causes:



Pieces of food



Raw/Hard vegetables



Small Pills



Small Toys

Batteries



Coins & Buttons

Symptoms:

To spot choking in kids, older ones may clutch their chest or neck. Encourage them to cough if your child is still conscious. Younger ones may not signal visibly. If a child goes silent or their face congests, promptly check their condition and begin the following steps; -



Bend them forward.

Administer 5 back blows between the shoulder blades.

Make a fist, place above the belly button,and proceed with abdominal thrusts.

Seek for medical attention and continue the back blows and abdominal / chest thrusts if the choking persists. If the child becomes unconscious at any stage, begin CPR immediately. Watch the First Aid video on CPR here.





CPR

CPR stands for cardiopulmonary resuscitation and is a crucial lifesaving technique in children with cardiac arrest.



Watch the First Aid Video on CPR here.

Causes:



Drowning



Suffocation



Choking



Electrocution



Excessive bleeding



Trauma



Poisoning

Lung disease

Symptoms:

- No breathing
- No pulse
- Unconsciousness

Actions: Before giving CPR to your infant / child, remember the acronym D-R-S-A-B-C-D



D: Assess for **DANGER**. Ensure you and your infant is in a safe environment.

R: Elicit a **RESPONSE** shouting their name and tapping their shoulder or bottom of their feet.

S: SHOUT for help, get someone to call 999 and get an
Automated External Defibrillator (if available). If you are alone, start CPR immediately.

A: Assess **AIRWAY** with the Head Tilt, Chin Lift Method.

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B: Check for **BREATHING**. Position your cheek close to their nose and mouth. Observe for chest movements.

- Seal infant's mouth and nose with your mouth.
- Take a deep breath and deliver 5 rescue breaths
 (1 breath, 1 second) into infant's mouth.
- Check for rising chest movement.







Continue CPR until: -

Qualified help arrives and takes over CPR.

C: Check for CIRCULATION by gently placing 2

A Full CPR cycle = 30 chest compressions + 2

5-10 seconds until you feel a pulse beat.

You have become exhausted.

Reassess your infant.

Check for breathing.

D: DEFIBRILLATION: If you have one within your reach, use an Automated External Defibrillator (AED)

of life. CPR is only performed if the heart has stopped

each compression

one-handed technique

For infant:

- Place both thumbs (side-by-side) on the centre of the infant's chest
- Encircle the other fingers around their chest toward the back, providing support
- Alternatively, use the two-finger technique

For a child:

- Place the heel of one hand in the centre of the chest
- Interlace fingers

SUNWAY HEALTHCARE

- Position shoulders directly • over your hands
- Lock elbows
- Keep arms straight •
- Push down hard (5cm or 2 • inches depth)
- Compression rate of 100 to 120 per minute
- it's normal position after

Allow the chest to recoil to

For toddler: use your palm for



Permanent brain damage can occur within 4 minutes if a child's blood flow stops circulating to the brain in a cardiac arrest



Watch the First Aid Video on CPR here



SUNWAY HEALTHCARE



Drowning

Drowning is often portrayed with noise and splashing on TV. But it is usually a quiet and silent struggle. Here are the steps to follow if you encounter a drowning child.



Watch the First Aid Video on Drowning here.

Signs:



Head low in water



Mouth at water level

Head tilted back, mouth open

Prevention:

- Supervising your children at all times when they are near, in, or around any bodies of water
- Checking the water depth to avoid any potential hazards or risks
- Provide swimming accessories such as a float, swimming vest, or a kickboard when they are in or around water

Actions:



Ensure your own safety first, and shout for help.



If the situation is dangerous, use a long object to reach the child or throw a float.



If you are able to swim;

- Approach the child from behind
- Support their head
- Swim to safety



Once the child is out of the water, keep them warm and dry.



Begin <u>CPR</u> immediately if the child is not breathing.





Electrical Injuries

Approximately 20% of electrical injuries occur in children leading to a range of injuries from mild burns to life-threatening conditions depending on the voltage, source, and duration of contact.



Causes:



Unsafe outlets and appliances



Faulty wiring



Water contact on electrical appliances/ power outlets



Damaged cords / exposed wires

Symptoms:

- Visible burns at the point of contact
- Pain/tenderness at shock site
- Difficulty in breathing
- Confusion or disorientation
- Numbness or tingling
- Involuntary muscle contractions or spasms
- Loss of consciousness this will happen in severe electrical injury

Actions:

Ensure the area is safe for you to attend to your child. Do not immediately rush over if there are live wires or other hazards.

• Turn off the power source.

Call emergency services or 999 immediately.

- Electrical injury can have delayed effects even if your child seems fine initially.
- Avoid touching your child with bare hands if they are still in contact with the electrical source.
- 4.

Use a non-conductive object (i.e: dry wooden stick) to move your child away from the source.

Check for your child's breathing and pulse.

• If your child is not breathing or does not have a pulse, start <u>CPR</u> immediately.

Treat the burns with cold water and cover the burns with a sterile dressing.

• Do not use ice

Bring your child to the hospital for assessment.





Febrile Fit & Seizures

A seizure is a sudden, uncontrolled burst of electrical energy in the brain. The most common cause of seizure in children is due to high fever typically above 38.3'C.



Watch the First Aid Video on Febrile Fit & Seizures here.

Causes:



High fever

An imbalance of nerve signalling brain chemicals (neurotransmitters)



Infection (bacterial and viral)



Brain tumour

Head Injury

Birth trauma

Symptoms:



Loss of consciousness Jerking movements of

arms and legs



Uprolling of eyes

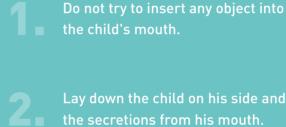
Clenched teeth



Loss of bladder or bowel control

Less commonly, your child can become rigid or have twitches in certain parts of the body only

Actions:



Lay down the child on his side and clear



Loosen tight clothing.



Time the seizures and stay with



Once seizure ends, place in recovery position.

Call an ambulance if the seizures lasts will be needed to stop the seizures.





Cough & Cold

Most coughs and cold in children are caused by viral infections. They easily spread through infected droplets from the nose and mouth.



Symptoms:



Blocked or runny nose

Sore throat

Cough

Sneezing

Lethargy

Less common symptoms:



Fever



Vomiting

Rash

Diarrhoea

Wheezing

Actions:

Seek medical attention when your child is unwell with symptoms such as:

- Wheezing.
- A 'sucking in' of the skin under the throat or around the ribs when breathing in.
- Flaring of nostrils when breathing.
- Breathlessness (only able to speak a few words at a time).
- Chesty or noisy cough.
- Reduce in food or fluid intake.
- High grade fever.

If your child's symptoms do not improve within a week or worsens, bring them to the doctor. We would recommend some tests or treatment to rule out complications or other cause of your child's symptoms.

Most coughs and cold caused by viruses get better on their own within a week. If your child has a cold virus, antibiotics will not help them recover as antibiotics only treats bacterial infections.





Foreign Bodies in the Throat

A foreign body in the throat can cause choking and is a medical emergency that needs immediate attention. The foreign body can get stuck in many different places within the airway.



Symptoms:



Drooling

Unable to swallow saliva/food



Coughing



Difficulty in breathing



Noisy breathing



Inability to speak

Actions:

Assess for any signs of distress in your child's
breathing, their severity of pain, and ability to speak and swallow.

Avoid making your child vomit. This might increase the risk of the object getting stuck or causing harm to the oesophagus or airway.

Encourage your child to cough forcefully if they
are able to as it might naturally remove the stuck object.

Seek immediate medical attention if your child is unable to breathe, experiencing severe pain, or if their condition worsens.





Foreign Bodies

Foreign bodies in the ear canal can be anything a child can push into the ear. Some objects placed in the ear may not cause symptoms, but objects such as insects may cause pain and redness in the ear.

Symptoms:



Pain in the ear



Bleeding from the ear



Hearing loss



Ear discharge

Actions:

Stay calm and seek immediate medical attention.

Do not poke or prod the object as it will push the object deeper into the ear and will cause more damage.

Foreign bodies in the ears need to be removed
 by an emergency or ENT doctor who is able to assess the object with proper instruments.

Removal under sedation or anaesthesia may be necessary in certain situations.





Foreign Bodies in the Nose

Objects that are put into the child's nose are usually clay, tissue, pieces of toys or erasers. Sometimes, a foreign body may enter the nose when the child is trying to smell the object.



Symptoms:



Difficulty in breathing



Noisy breathing



Bleeding or discharge from the nose

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Pain in the nose

Actions:

Assess for any signs of breathing difficulty or bleeding.

Encourage your child to breathe through their mouth.

- Do not attempt to remove the object with your
 fingers/tweezers as this can increase the risk of pushing it further into the nose.
- Gently press and close the other free nostril,
 and ask your child to blow their nose gently as this may help push the object out.
- If failed, bring your child to the nearest medical
 facility to get the foreign body removed by a doctor





Poisoning

Poisoning can affect many parts of the body, including the lungs, heart, gastrointestinal tract, central nervous system and kidneys. Most poisoning in children are unintentional and occurs at home.



Causes:



Household products



Cleaning substances



Essential oils



Insecticides, Pesticides, or Rodenticide



Prescribed medications (antihypertensive, antidiabetic, antidepressant, Parkinson drugs and etc)



Cosmetics or personal care products

Actions:

Immediately remove the poison from the eyes, skin, and mouth with these actions:

Eyes

- Gently wash the eyes with plenty of tap water for at least 5 minutes with the eyelids held open.
- Do not allow your child to rub the affected eye(s).

Skin

- Wash the poison off the skin with large volumes of water.
- Remove contaminated clothing.

Mouth

- Remove all tablets or powder from the child's mouth.
- Examine for any burns, cuts or irritation.

If exposed to gases or fumes:

- Get your child to fresh air.
- Loosen all clothing.
- If your child is not breathing, clear the throat and start mouth-to-mouth respiration <u>(CPR)</u>. Continue until help arrives.





Poisoning

Poisoning in children, even in small amounts ingested can be fatal. Poisons can either be ingested orally, through inhalation, or contact with their skin, or exposure to the eyes.



Symptoms:



Nausea

Vomiting



Abdominal pain



Restlessness



Drowsiness



Unconsciousness



Confusion or altered mental state



Seizures

If the poison was ingested:

- Go to the nearest hospital immediately and bring a sample of the poision.
- Do not induce vomiting especially if it is kerosene, strong acid, or alkali poisoning, especially if your child is unconscious or having a seizure.
- Keep your child in a sideways position and clear all secretions from the mouth.

Prevention:

- Supervise your children.
- Keep medication / alcohol out of sight and out of reach of children.
- Keep medication in child-resistant and labelled containers.
- Give the right dose of medication.
- Unused medication should be disposed of, thrown down the sink, buried or burnt.
- Handle food with care always wash hands before handling food, cook raw meats and eggs, and rinse your fruits and vegetables.
- Educate your children regarding safety basics.
- Avoid storing poisons in used 'carbonated drinks' bottles as children may mistake it for drinks.





Trauma (Dislocation/Fractures)

Fractures are common in childhood injury and children's bones are not fully developed making them more fragile. In children, most fractures occurs in the wrist, forearm and elbow.



Older children will usually be able to tell you where they are sore and can explain how the injury happened. This makes it easier to identify a fracture.

For infants and toddlers, they may cry and may not use the affected limb, but there may be no obvious injury.

Symptoms:

- Deformity (unusual shape) of the injured area
- Swelling, bruising or redness
- Pain at injury site
- Numbness and tingling
- Limited mobility or inability to move the limb

Actions:



Support the injured limb.

Make an arm sling using any available cloth or scarves.

Slide cloth beneath the arm. Bring upper end around the back of your child's neck, fold the lower end up over the forearm.



Tie a knot above the collarbone and secure the elbow.

Check for blood circulation every 10 minutes by pressing the nailbed and checking for quick return of colour.

Take note of the injury, how and when it occurred. Give your child some paracetamol for pain relief.



Bring your child to the hospital for immediate medical attention.

5. Fractures are treated using a splint or a cast to restrict movements until the bone heals. Depending on the type of injury, the cast may need to stay up to three months. Most fractures heal well and cause no long term complications.





Vomiting & Diarrhoea

Vomiting and diarrhoea causes your body to lose important fluids and salts. This can happen very quickly in children. So it's very important to replace these fluids and prevent dehydration.

Symptoms:

- Increase in stool frequency.
 - Twice the usual number per day for infants (loose and watery stools are normal in breastfed babies)
 - 3 times or more loose or watery stools per day in older children
- Persistent vomiting
 - Take note of forceful vomiting in a newborn
 - Blood-stained vomit or diarrhoea; or vomit that looks like coffee grounds
- Decreased urination, or not urinating at all for 3-4 hours
- Lethargy, drowsiness, or increased irritability
- Sunken eyes or dry lips
 - In infants, the soft spot on the head becomes sunken
- Vomiting after an injury to the head
- Hard, bloated, or a painful tummy

Actions:

Feed frequ

Feed small amounts of liquid frequently.

- For Infants:
 - Give them 1 tablespoon of oral rehydration solution (ORS) every 15-20 minutes
 - Continue to breastfeed or bottle feed normal formula milk.
- For Older Children:
 - Give them 1-2 tablespoons of ORS every 15 minutes with diluted juice. (Around 100-200 ml after each loose stool or vomiting).



If your child continues to vomit, wait 10 minutes and then continue slowly.







Vomiting & Diarrhoea

Vomiting is commonly caused by a viral infection of the digestive system, called viral gastroenteritis, which often results in diarrhoea as well. Depending on your child's age and symptoms, there are many other causes of vomiting and diarrhoea that would benefit from a proper assessment by a doctor.

It is important to consult a doctor and get a proper diagnosis when your child shows dehydration or poor oral feeding, for example:

- Lethargy
- Dry mouth and lips
- No tears on crying
- Sunken eyes
- Poor skin elasticity (when skin at the back of the hand is pulled up for a few seconds, it does not return to original state)
- Cold and clammy hands/feet
- Reduction in urine
- Unable to tolerate any fluids

Severe signs:

- Severe abdominal pain
- Non resolving vomiting
- Yellowish/ greenish vomit
- Abdominal swelling
- Drowsiness, irritability
- Poor colour / pale

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Slowly increase the amount of liquids once there is no vomiting for 3 - 4 hours.

Gradually introduce bland and easy-to-digest food and monitor the amount consumed and their improvement in activity.



Avoid dairy products, sweetened fruit juice, and sugary food.



Monitor the frequency of your child's amount of vomit, diarrhoea, and urine.



Seek medical attention immediately if the vomit is greenish colour , coffee ground or blood stained or projectile in nature.

5. To prevent spread, always remember that good hand hygiene is extremely important! Frequently wash their hands with soap and water, wipe surfaces with disinfectant, and do not share towels.





First Aid E-Booklet



This Paediatric First Aid Guide does not replace professional medical advice. Please seek immediate medical attention during emergency situations.

Sunway Medical Centre KL A&E Department: 03 7491 2801

Malaysia Emergency Response Services: 999

Special thanks to:

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Sunway Medical Centre Medical Director Dr Low Kwai Siong

Sunway Medical Centre Accident & Emergency Head of Department Dr Lee Soon Han

Familiarise yourself with these life-saving guides and you may save a life.

